

Application No. 10/530,130

Reply to Office Action

REMARKS*Claim Amendments*

Claim 1 has been amended to expedite the prosecution of this application by reciting that the cooling rate varies between 0.5 and 30°C/s. Support for the amendment can be found in the claims and specification as originally filed, for example, at page 7, line 37 - page 8, lines 1-6. Claims 25-29 and 36 have been canceled. No new matter has been introduced into the application by way of these amendments.

Summary of the Office Action

The Office Action provisionally rejects claims 1-40 under the judicially created doctrine of obviousness-type double patenting as allegedly unpatentable over copending Application No. 10/530,394.

The Office Action rejects claims 1-24 under 35 U.S.C. § 102(b) as allegedly anticipated by European Patent Application 1 074 386 A2 ("the Huang '386 application").

The Office Action rejects claims 1-40 under 35 U.S.C. § 102(e) as allegedly anticipated by U.S. Patent 6,723,489 ("the Aburano '489 patent").

The Office Action rejects claims 25-40 under 35 U.S.C. § 103(a) as allegedly unpatentable over the Huang '386 application.

Discussion of the Provisional Obviousness-Type Double Patenting Rejection

As the rejection is only provisional, applicants wish to address this issue in detail if an actual rejection is in fact made. Accordingly, applicants request that issue be held in abeyance until an indication of allowable claims is available.

Discussion of the Anticipation Rejections

The Office Action rejects claims 1-24 under 35 U.S.C. § 102(b) as allegedly anticipated by the Huang '386 application. Applicants respectfully traverse this rejection.

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The method of making a lithographic printing plate precursor defined by independent claim 1 comprises an active cooling step (step iv) wherein the web temperature is reduced at an average cooling rate which is higher than if the web would be kept under ambient conditions.

The Office Action alleges that the Huang '386 application teaches controlled slow cooling under conditions such that heat is lost from the printing plate precursor *more slowly* than if it is cooled from the elevated temperature under ambient conditions (emphasis added). However, as noted above, claim 1 comprises a cooling step wherein the web temperature is reduced at an average cooling rate which is *higher* than if the web would be kept under ambient conditions (emphasis added). The Huang '386 application explains how this slow cooling may be carried out, for example, by providing thermally insulating material around the precursor or by leaving it in an oven in which it was subjected to an elevated temperature, which has been set to progressively lower temperatures or, preferably, simply has been turned off. Thus, the Huang '386 application clearly teaches a cooling step which is slower than under ambient conditions, i.e., the opposite of step (iv) of claim 1 where fast cooling of the precursor (i.e. a cooling step faster than under ambient conditions) is required.

Moreover, the Huang '386 application fails to disclose the cooling rate as presently recited. As observed by the Office Action, the cooling rate disclosed in the Huang '386 application is not greater than 1°C/min or 0.2°C/min. These translate to not greater than 0.0167°C/sec or 0.0033°C/sec. These cooling rates are distinctly different from the recited cooling rate of 0.5 to 30°C/sec. As claims 2-24 are directly, or indirectly dependent on, and include all of the limitations of claim 1, the Huang '386 application fails to disclose each and every element of the rejected claims.

In addition, step (v) of claim 1 is also not taught in the Huang '386 application.

Since the Huang '386 application does not disclose the subject matter of the rejected claims, the anticipation rejection based on the Huang '386 application is erroneous and should be withdrawn.

The Office Action rejects claims 1-40 under 35 U.S.C. § 102(e) as allegedly anticipated by the Aburano '489 patent.

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The method of making a lithographic printing plate precursor defined by rejected claim 1, as amended, comprises an active cooling step wherein the web temperature is reduced at an average cooling rate which is higher than if the web would be kept under ambient conditions and varies between 0.5 and 30°C/s.

The Office Action alleges that the Aburano '489 patent teaches a heat treatment of lithographic printing form precursors in web form comprising positive working polymeric coating on substrates. The heat treatment allegedly involves a relatively short heating stage followed by accelerated cooling. However, the Aburano '489 patent, at examples 1 and 2, discloses cooling rates slower than the average cooling rates claimed in claim 1, as amended. Specifically, example 1 of the Aburano '489 patent discloses, at best, a cooling rate of 0.18°C/s ($\Delta 80^\circ\text{C}/600\text{s} = 0.18$), while example 2 discloses, at best, a cooling rate of 0.2°C/s ($\Delta 120^\circ\text{C}/600\text{s} = 0.2$). Further, the cooling step disclosed in examples 1 and 2 of the Aburano '489 patent utilizes ambient, still air, rather than active cooling. As claims 2-24, 30-35, and 37-40 are directly, or indirectly dependent on, and include all of the limitations of claim 1, the Aburano '489 patent fails to disclose each and every element of the pending claims. Specifically, the Aburano '489 patent does not disclose an active cooling step wherein the web temperature is reduced at an average cooling rate which is higher than if the web would be kept under ambient conditions and varies between 0.5 and 30°C/s.

Since the Aburano '489 patent does not disclose the subject matter of any of the rejected claims, the anticipation rejection based on the Aburano '489 patent should be withdrawn.

Discussion of the Obviousness Rejection

As noted above, the Office Action rejects claims 25-40 under 35 U.S.C. § 103(a) as allegedly unpatentable over the Huang '386 application. Applicants respectfully traverse this rejection.

Claims 25-29 and 36 have been canceled. Claims 30-35 and 37-40 are directly or indirectly dependent on, and include all of the limitations of claim 1, which is discussed above with respect to the anticipation rejection based on the Huang '386 application. The obviousness rejection is predicated on the assumption that the Huang '386 application

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discloses the method of claim 1. This assumption is not correct, as discussed above with respect to the anticipation rejection.

Further, the Huang '386 application teaches away from the present claims. The Huang '386 application teaches cooling the precursor *more slowly* than if it is cooled from the elevated temperature. In contrast, the present claims require a cooling step at an average cooling rate which is *higher* than if the web would be kept under ambient conditions. Motivation is lacking when the state of the art at the time of the invention pointed researchers in a different direction than the inventor proceed. Proceeding against the accepted wisdom in the art is a strong evidence of non-obviousness. *In re Hedges*, 783 F.2d 1038, 228 USPQ 685 (Fed. Cir. 1986).

Moreover, there is no reasonable expectation of success in arriving at the presently claimed invention starting from the Huang '386 application. It would be impossible to obtain a faster cooling starting from the cited reference which teaches cooling more slowly.

In view of the foregoing, the present claims should be patentable over the Huang '386 application, and the obviousness rejection should be withdrawn.

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Conclusion

As Applicants believe the application is in proper condition for allowance, the Examiner is respectfully requested to pass the application to issue. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,



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